SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: POWELL, Jerry S.
 - (ii) TITLE OF INVENTION: HUMAN ERYTHROPOIETIN GENE: HIGH LEVEL EXPRESSION IN STABLY TRANSFECTED MAMMALIAN CELLS
 - (iii) NUMBER OF SEQUENCES: 6
 - (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Dorsey & Whitney, LLP
 - (B) STREET: Suite 3400, 1420 Fifth Avenue, U.S. Bank Centre
 - (C) CITY: Seattle
 - (D) STATE: Washington
 - (E) COUNTRY: USA
 - (F) ZIP: 98101
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: MS-WORD
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: Not Yet Assigned
 - (B) FILING DATE: Concurrently Herewith
 - (viii) PREVIOUS APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/466,412
 - (B) FILING DATE: June 6, 1995
 - (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Roberts, Mark W.
 - (B) REGISTRATION NUMBER: 46,160
 - (C) REFERENCE/DOCKET NUMBER: 500582.12
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 206-903-8748
 - (B) TELEFAX: 206-903-8820
- (2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2426 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

CCCGGTGTGG TCACCCGGCG CGCCCCAGGT CGCTGAGGGA CCCCGGCCAG GCGCGGAGAT 60

GGGGGTGCAC GGTGAGTACT CGCGGGCTGG GCGCTCCCGC CCGCCCGGGT CCCTGTTTGA 120

GCGGGGATTT AGCGCCCGG CTATTGGCCA GGAGGTGGCT GGGTTCAAGG ACCGGCGACT 180

TGTCAAGGAC CCCGGAAGGG GGAGGGGGT GGGGCAGCCT CCACGTGCCA GCGGGGACTT 240

GGGGGAGTCC TTGGGGATGG CAAAAACCTG ACCTGTGAAG GGGACACAGT TTGGGGGTTG 300

AGGGGAAGAA GGTTTGGGGG GTTCTGCTGT GCCAGTGGAG AGGAAGCTGA TAAGCTGATA 360

ACCTGGGCGC TGGAGCCACC ACTTATCTGC CAGAGGGGAA GCCTCTGTCA CACCAGGATT 420

GAAGTTTGGC CGGAGAAGTG GATGCTGGTA GCCTGGGGGT GGGGTGTGCA CACGGCAGCA 480

GGATTGAATG AAGGCCAGGG AGGCAGCACC TGAGTGCTTG CATGGTTGGG GACAGGAAGG 540

ACGAGCTGGG GCAGAGACGT GGGGATGAAG GAAGCTGTCC TTCCACAGCC ACCCTTCTCC 600

CTCCCCGCCT GACTCTCAGC CTGGCTATCT GTTCTAGAAT GTCCTGCCTG GCTGTGGCTT 660

CTCCTGTCCC TGCTGTCGCT CCCTCTGGGC CTCCCAGTCC TGGGCGCCCC ACCACGCCTC 720

ATCTGTGACA GCCGAGTCCT GCAGAGGTAC CTCTTGGAGG CCAAGAAGGC CGAGAATATC 780

ACGGTGAGAC CCCTTCCCCA GCACATTCCA CAGAACTCAC GCTCAGGGCT TCAGGGAACT 840

CCTCCCAGAT CCAGGAACCT GGCACTTGGT TTGGGGTGGA GTTGGGAAGC TAGACACTGC 900

CCCCCTACAT AAGAATAAGT CTGGTGGCCC CAAACCATAC CTGGAAACTA GGCAAGGAGC 960

AAAGCCAGCA GATCCTACGC CTGTGGCCAG GGCCAGAGCC TTCAGGGACC CTTGACTCCC 1020

CGGGCTGTGT GCATTTCAGA CGGGCTGTGC TGAACACTGC AGCTTGAATG AGAATATCAC 1080

TGTCCCAGAC ACCAAAGTTA ATTTCTATGC CTGGAAGAGG ATGGAGGTGA GTTCCTTTT 1140

TTTTTTTTT CCTTTCTTTT GGAGAATCTC ATTTGCGAGC CTGATTTTGG ATGAAAGGGA 1200

GAATGATCGA GGGAAAGGTA AAATGGAGCA GCAGAGATGA GGCTGCCTGG GCGCAGAGGC 1260

TCACGTCTAT AATCCCAGGC TGAGATGGCC GAGATGGGAG AATTGCTTGA GCCCCGGAGT 1320

TTCAGACCAA CCTAGGCAGC ATAGTGAGAT CCCCCATCTC TACAAACATT TAAAAAAATT 1380

AGTCAGGTGA AGTGGTGCAT GGTGGTAGTC CCAGATATTT GGAAGGCTGA GGCGGGAGGA 1440

TCGCTGGAGC CCAGGAATTT GAGGCTGCAG TGAGCTGTGA TCACACCACT GAACTCCAGC 1500

ATTCAACAAG TCTTATTGCA TACCTTCTGT TTGCTCAGCT TGGTGCTTGG GGCTGCTGAG 1680

GGGCAGGAGG GAGAGGGTGA CATCCCTCAG CTGACTCCCA GAGTCCACTC CCTGTAGGTC 1740

GGGCAGCAGG CCGTAGAAGT CTGGCAGGGC CTGGCCCTGC TGTCGGAAGC TGTCCTGCGG 1800

GGCCAGGCCC TGTTGGTGAA CTCTTCCCAG CCGTGGGAGC CCCTGCAGCT GCATGTGGAT 1860

AAAGCCGTCA GTGGCCTTCG CAGCCTCACC ACTCTGCTTC GGGCTCTGGG AGCCCAGGTG 1920

AGTAGGAGCG GACACTTCTG CTTGCCCTTT CTGTAAGAAG GGGAGAAGGG TCTTGCTAAG 1980

GAGTACAGGA ACTGTCCGTA TTCCTTCCCT TTCTGTGGCA CTGCAGCGAC CTCCTGTTTC 2040

CTCCTTGGCA GAAGGAAGCC ATCTCCCCTC CAGATGCGGC CTCAGCTGCT CCACTCCGAA 2100

CAATCACTGC TGACACTTTC CGCAAACTCT TCCGAGTCTA CTCCAATTTC CTCCGGGGAA 2160

AGCTGAAGCT GTACACAGGG GAGGCCTGCA GGACAGGGGA CAGATGACCA GGTGTGTCCA 2220

CCTGGGCATA TCCACCACCT CCCTCACCAA CATTGCTTGT GCCACACCCT CCCCGCCAC 2280

TCCTGAACCC CGTCGAGGGG CTCTCAGCTC AGCGCCAGCC TGTCCCATGG ACACTCCAGT 2340

GCCACCAATG ACATCTCAGG GGCCAGAGGA ACTGTCCAGA GAGCAACTCT GAGATCTAAG 2400

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Ala Pro Xaa Arg Leu Ile Leu Asp Ser Arg Val Leu Glu Arg Tyr Leu 15

10

Leu Glu Ala Lys Glu Ala Glu Xaa Ile Thr Asp Gly Gly Ala 25 30 20

- (2) INFORMATION FOR SEQ ID NO:3:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 7 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Glu Ala Lys Glu Ala Glu Asn

1 5

- (2) INFORMATION FOR SEQ ID NO:4:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: single(D) TOPOLOGY: linear	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:	
TTYTCDGCYT CYTTDGCTTC	20
(2) INFORMATION FOR SEQ ID NO:5:	
(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 6 amino acids(B) TYPE: amino acid(C) STRANDEDNESS: single(D) TOPOLOGY: linear	
(ii) MOLECULE TYPE: peptide	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:	
Glu Asn Ile Thr Asp Gly 1 5	
(2) INFORMATION FOR SEQ ID NO:6:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) 	
(II) MOLLCOLL 111 L. DIVI (gonomic)	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6: